

Western Climate Initiative



www.westernclimateinitiative.org

Western Climate Initiative **Statement of Regional Goal**

August 22, 2007

1. **Regional Goals.** The Western Climate Initiative (WCI) regional greenhouse gas emission reduction goal is an aggregate reduction of 15% below 2005 levels by 2020.

- This regional, economy-wide goal is consistent with the emission goals of WCI partners and does not replace the partners' existing goals.
- The WCI partners acknowledge that new entrants and updates to data may result in some incremental changes to the regional goal.
- The metrics for establishing this goal are documented in Attachment A.

The WCI partners commit to do their share to reduce regional GHG emissions sufficient over the long term to significantly lower the risk of dangerous threats to the climate. Current science suggests that this will require worldwide reductions between 50% and 85% in carbon dioxide emissions from current levels by 2050.¹

2. **New Entrants.** The WCI encourages participation by additional US states, tribes, Canadian provinces, and Mexican states that are making comparable efforts to combat climate change. In determining whether the new entrant is undertaking comparable efforts to meet the challenge of climate change, the partners shall consider whether the proposed new entrant:

- a. Has adopted an economy-wide greenhouse gas reduction goal. The goal shall reflect a level of effort that is consistent with that of the WCI partners;

¹ IPCC Fourth Assessment Report, Working Group III, Mitigation of Climate Change

- b. Has developed or is developing a comprehensive multi-sector climate action plan to achieve the goal;
- c. Has committed to adopt greenhouse gas tailpipe standards for passenger vehicles; and
- d. Is participating in The Climate Registry.

When deciding whether to accept a new entrant, the partners may consider other factors they deem appropriate. The partners will establish a decision-making process on adopting new entrants.

3. Coverage of Actions in the Goal. Emissions reduction activities by which partners achieve the regional reduction goal should be comprehensive and economy-wide, including:

- a. Regional multi-sector market-based mechanisms;
- b. Actions in all sectors, including but not limited to: stationary sources, energy supply, residential, commercial, industrial, transportation, waste management, agriculture, and forestry; and
- c. Reduction in emission of any GHG reported to the UN Framework Convention on Climate Change by the USEPA and Environment Canada, i.e., carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

4. Reporting Requirements. Each partner will update the other WCI partners on their climate action plan and GHG emissions inventories every two years to ensure that actions are underway at levels consistent with full achievement of the 2020 goal.

Attachment A: Metrics used to Establish WCI Regional Goal

The WCI aggregate greenhouse gas emission reduction goal of 15% below 2005 levels by 2020 is based on:

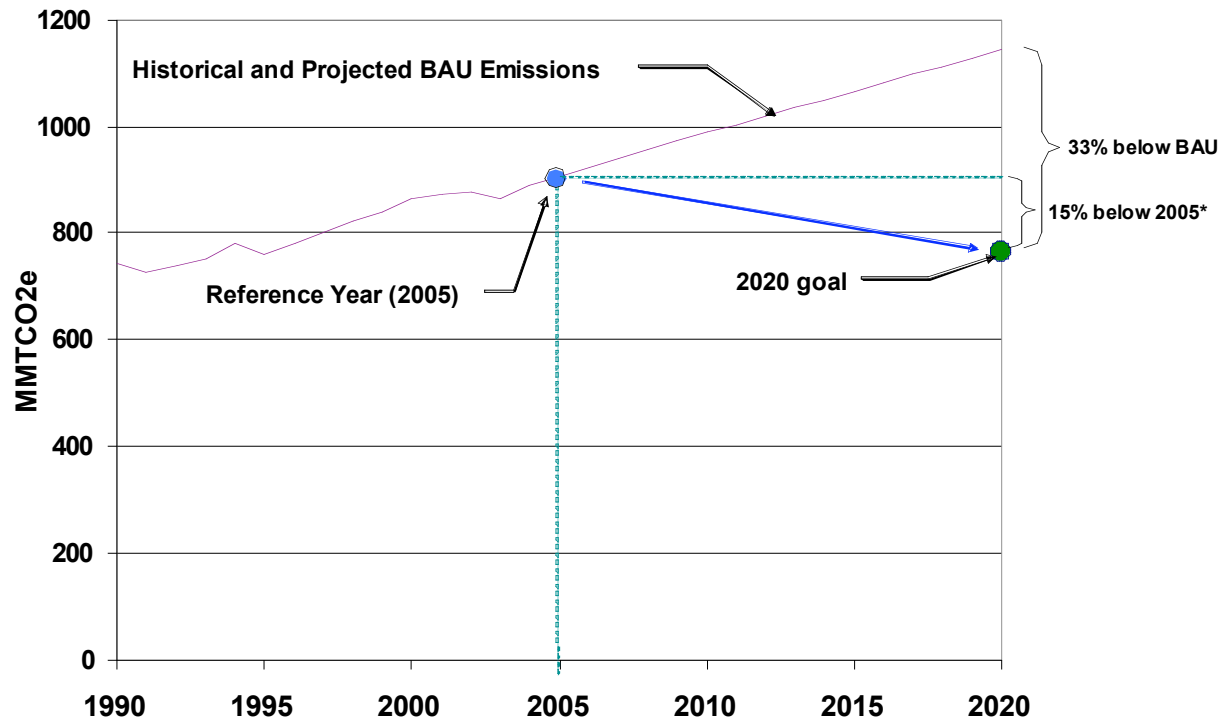
- The aggregation of GHG emissions and emissions goals of WCI partners that have thus far established a 2020 goal (Arizona, British Columbia, California, New Mexico, Oregon, and Washington) and Manitoba's short-term goal, as shown in the Table 1 below.
- Currently available state or provincial emissions inventories. Some of these inventories are currently under revision, and the values shown in Table 2 below will be periodically updated. While further changes to specific emissions estimates are likely, the aggregate regional emission reduction goal for the current partners is unlikely to deviate substantially from 15% below 2005 levels by 2020.
- Gross emissions estimates, across all sectors, for the six greenhouse gases reported to the UN Framework Convention on Climate Change by the USEPA in the U.S. Greenhouse Gas Inventory and by Environment Canada in the Canada National Inventory Report: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These estimates are presented in terms of CO₂ equivalence (CO₂e), which indicates the relative contribution of each gas to global average radiative forcing on a 100-year Global Warming Potential (GWP) weighted basis. Gross emissions estimates do not include changes in biological carbon stocks due to agriculture, forestry, and land use change. In addition, GHG emissions associated with international aviation and international bunker fuels are generally excluded.
- Consumption-based (or "load-based") emissions estimates for the electricity sector, except where such estimates are currently unavailable, in which case production-based estimates are used (British Columbia). Consumption-based estimates reflect the emissions associated with generating the electricity delivered to consumers in each state or province whether the electricity was generated in state/province or out of state/province. Considerable work is currently underway to further develop and improve consumption-based estimates.

Table 1. State and Provincial Goals for GHG Reductions

	Short Term (2010-12)	Medium Term (2020)	Long Term (2040-50)
Arizona	not established	2000 levels by 2020	50% below 2000 by 2040
British Columbia	not established	33% below 2007 by 2020	not established
California	2000 levels by 2010	1990 levels by 2020	80% below 1990 by 2050
Manitoba	6% below 1990	6% below 1990 ²	not established
New Mexico	2000 levels by 2012	10% below 2000 by 2020	75% below 2000 by 2050
Oregon	arrest emissions growth	10% below 1990 by 2020	>75% below 1990 by 2050
Utah	Will set goals by June 2008		
Washington	not established	1990 levels by 2020	50% below 1990 by 2050

² Manitoba has not yet established a formal goal for 2020, but expects to meet or do better than its short term goal.

WCI Partner GHG Emissions and Regional Goal³



BAU = Business-as-usual (projections).

The arrow shown is purely directional: it illustrates the where regional emissions will need to be by 2020 rather than the specific path emissions are expected to follow during the 2007-2020 period.

* See footnote c in the Table 2 below.

³ Note that this chart does not include Manitoba emissions, which will be added when 2020 projections are available.

Table 2 compiles and compares WCI partner goals for the year 2020, and indicates the relative percentage emissions reduction below historical (1990, 2000, and 2005) or projected (business-as-usual or “BAU” in 2020) levels that these goals imply. Also shown are the absolute emission reductions below projected BAU levels in 2020 in million metric tons of CO₂ equivalents (MMtCO₂e) that are needed to meet these goals. The final column indicates how fast greenhouse gas emissions would be expected to grow from 1990 to 2020 were no action taken to reduce them. The final row shows the aggregate result for the WCI partners that have established 2020 goals (percents are based on total emissions for the partners shown). As illustrated, the compilation of partner goals represents an aggregate 16% reduction below 2005 levels by 2020. This figure has been rounded to 15% for the regional goal, as stated above.

**Table 2. Summary Compilation and Comparison of 2020 goals
(Estimates as of July 2007^a)**

	Goals					1990-2020 BAU growth
	Relative to 1990	Relative to 2000	Relative to 2005	Relative to 2020 BAU ^b	Absolute Reductions from BAU (MMtCO ₂ e)	
Arizona	35%	0%	-11%	-45%	72	144%
British Columbia	-9%	-27%	-30%	-46%	40	69%
California	0%	-10%	-14%	-28%	170	40%
Manitoba	-6%	-16%	-17%	TBD	TBD	TBD
New Mexico	14%	-10%	-14%	-31%	28	65%
Oregon	-10%	-29%	-32%	-44%	40	61%
Washington	0%	-16%	-11%	-28%	33	40%
Total	2%	-12%	-16%^c	-33%^d	383^d	54%^d

^a Methodologies for estimating electricity emissions may not be fully comparable. State electricity emissions estimates used to develop the figures shown above are consumption-based (i.e. “load-based”); methodologies for consumption-based electricity emissions vary among states. Provincial electricity emission estimates are currently available only on a production basis.

^b Current BAU forecasts (2020 estimates) may not be fully comparable. Two factors, in particular, may need to be further examined with respect to assessing comparability of effort: a) underlying socioeconomic projections, most notably population and economic activity; and, b) the extent to which emission reduction actions are included in BAU projections.

^c The WCI goal of 15% below 2005 levels reflects a rounding of this figure, which may change slightly as partner states and provinces continue to refine their GHG inventories.

^d These totals do not include Manitoba emissions, since projections are not currently available.

References for GHG emissions estimates:

Arizona: "Climate Change Action Plan", Arizona Climate Change Advisory Group, August 2006.
<http://www.azclimatechange.gov/>

British Columbia: Historical emissions from Environment Canada, "National Inventory Report: 1990 - 2005", http://www.ec.gc.ca/pdb/ghg/inventory_report/2005_report/toc_e.cfm; projections from BC Ministry of Environment calculations based on Natural Resources Canada and Simon Fraser University estimates.

California: "Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004", Staff Final Report, December 2006, CEC-600-2006-013-SF,
http://www.climatechange.ca.gov/policies/greenhouse_gas_inventory/index.html

Manitoba: Historical emissions from Environment Canada, "National Inventory Report: 1990 - 2005",
http://www.ec.gc.ca/pdb/ghg/inventory_report/2005_report/toc_e.cfm

New Mexico: "Final Report", New Mexico Climate Change Advisory Group, December 2006,
<http://www.nmclimatechange.us>

Oregon: "Oregon Strategy for Greenhouse Gas Reductions", Governor's Advisory Group on Global Warming, December 2004, <http://www.oregon.gov/ENERGY/GBLWRM/Strategy.shtml>, with subsequent revisions yet to be published.

Washington: "Greenhouse Gas Inventory and Reference Case Projections", Washington State Climate Advisory Team, April 2007 Draft, with subsequent revisions yet to be published.
http://www.ecy.wa.gov/climatechange/cat_documents.htm

References for GHG emissions goals:

Arizona: "Climate Change Action" Governor Janet Napolitano's Executive Order 2006-13, September 8, 2006 http://www.governor.state.az.us/dms/upload/EO_2006-13_090806.pdf

British Columbia: "Speech from the Throne" February 13, 2007 <http://www.leg.bc.ca/38th3rd/4-8-38-3.htm>

California: Governor Arnold Schwarzenegger's Executive Order S-3-05 and AB32 legislation,
<http://www.climatechange.ca.gov/>

Manitoba: "Kyoto and Beyond", Province of Manitoba Climate Change Action Plan, 2002,
<http://www.gov.mb.ca/est/climatechange/pdfs/final-mccap-sep-16-02.pdf>

New Mexico: "Climate Change and Greenhouse Gas Reduction", Governor Bill Richardson's Executive Order 2005-033, June 9, 2005, <http://www.governor.state.nm.us/2005orders.php>

Oregon: Enrolled House Bill 3543, signed into law on August 7, 2007 by Governor Ted Kulongoski,
<http://www.leg.state.or.us/07reg/measpdf/hb3500.dir/hb3543.en.pdf>

Washington: Governor Christine Gregoire's Executive Order 07-02, February 7, 2007,
http://www.governor.wa.gov/execorders/eo_07-02.pdf and Engrossed Substitute Senate Bill (ESSB) 6001, <http://www.leg.wa.gov/pub/billinfo/2007-08/Pdf/Bill%20Reports/Senate%20Final/6001-S.FBR.pdf>